

## REMR MATERIAL DATA SHEET CM-SE-1.2

# CONCRETE SEALER: CONSOLIDECK SX (Supersedes previously issued CM-SE-1.2)

1. NAME

Consolideck SX

#### 2. MANUFACTURER

ProSoCo PO Box 1578 Kansas City, KS 66117 Telephone: (913) 281-2700

#### DESCRIPTION

Oligomeric alkyl-alkoxy siloxane.

#### 4. USES & LIMITATIONS

<u>Uses:</u> Consolideck SX is formulated for low-pressure spray application to concrete flatwork, parking structures, athletic stadiums, and engineered concrete structures. It stops intrusion of water, salts, deicer chemicals, acids, and oils, which result in costly damage to parking decks and concrete structures.

<u>Limitations:</u> Consolideck SX should not be applied at surface and air temperatures below 40° F or above 100° F. The material should be stored in sealed containers and kept away from extreme heat.

#### MANUFACTURER'S TECHNICAL DATA

Active substance: Oligomeric siloxane

with long alkyl groups.

Active substance content: 20%

Specific gravity: 0.815

Flash point (CC): (Mineral spirits)

100° F

Flash point (CC): (Alcohol) 43° F Appearance: Slightly opalescing

liquid

Solvent: Mineral spirits or alcohol

Weight per gallon: 6.6 lb

<u>Performance tests:</u> Consolideck SX has been tested according to current test procedures in the industry. Testing includes water absorption/repellency ratings, penetration, and salt spray resistance. Results are listed below, and independent test reports are available on request.

- a. Chloride Screen-Wiss, Janney
   Elstner test using NCHRP 244 91%
   (1 application at 125 sq ft/gal)
- b. Water absorption
  (ASTM C 67 and ASTM C 140) 1.403
- c. Repellency rating
  (ASTM C 67 and ASTM C 140) 98.60%
- d. Penetration
  (1 application) 1/8-1/4 in.
- e. Scaling resistance or concrete surfaces exposed to deicing chemicals

  (ASTM C 672) Excellent

#### Warranty:

ProSoCo, Inc., warrants this product to be free from defects. ProSoCo makes no other warranties with respect to this product, express or implied, warranties of merchantability or fitness for particular purpose. ProSoCo's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied.

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ProSoCo shall have no other liability, including liability for incidental, consequential, or resultant damages whether due to beach of warrant or negligence. This warranty may not be modified or extended by representatives of ProSoCo, Inc., its distributors, or dealers.

Precautions: Consolideck SX contains blended solvents and should be handled accordingly. It should not be used near fire or extreme heat, and good ventilation should be provided to avoid buildup of solvent fumes. Applicators should wear approved NIOSH/MSHA-approved respirators. ing application to exteriors of occupied buildings, all exterior air conditioning vents should be covered, and air-handling equipment should be turned off to avoid solvent odors within the building. Clothing that may become contaminated with Consolideck SX should be changed as quickly as possible.

## 6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Surface preparation: All caulking, patching, and joint sealants should be installed prior to application of Consolideck SX. Concrete surfaces should be cleaned free of dust, surface dirt, and contaminants. New concrete should be thoroughly cured before application of Consolideck SX. New concrete does not normally require etching. Older concrete surfaces should be power washed with high-pressure water and appropriate cleaners to assure removal of surface dirt, oil, and contaminants that may have built up over the years.

Surfaces to be treated may be damp but should be absorbent to assure good penetration of Consolideck SX.

Note: If a chemical curing agent is to be used during installation of new concrete, a test area is recommended prior to general application to assure compatibility. It is impossible to assure compatibility with all products.

Application: Consolideck SX should be applied as packaged. Material should not be diluted or altered. The preferred method of application is with low-pressure (20 psi) airless spray equipment or with a heavily saturated brush or roller. Sprayer should be fitted with solvent-resistant hoses and gaskets.

When using brushes or rollers, care should be taken to assure that enough solution is applied. Sufficient material should be applied to thoroughly saturate the surface, making sure to brush out excess material that does not penetrate.

Consolideck SX should be applied to flat surfaces in a single saturating application with sufficient material applied so that the surface remains wet for a few minutes before penetration into the concrete. Surface residues, pools, and puddles should be broomed out thoroughly until they completely penetrate into the surface.

Consolideck SX should be applied to the vertical surface in two "wet-on-wet" applications for best results on most porous materials. In the case of extremely dense, mirror-finish architectural concrete and similar surfaces, it may be necessary to restrict the amount of material applied to one saturating application in order to prevent surface darkening.

Consolideck SX should be applied in a flooding application, from the bottom up with sufficient material applied to produce a 6- to 8-in. rundown below the contact point of the spray pattern with the masonry surface. The first application should be allowed to penetrate the masonry surface (approximately 3 to 5 min) and reapplied in the same saturating manner. Less material will be required to saturate the surface on the second application.

Treated surfaces should be protected from rain and foot traffic for 4 to 6 hr following application of Consolideck SX. There should be no vehicular traffic for 24 hr.

Coverage rates: Porosity and texture of the masonry surface will affect the amount of material necessary for effective treatment. The following is a guide for estimating material requirements for concrete.

Broom finish 120-150 sq ft/gal Slick trowel finish 200 sq ft/gal Older concrete (very porous) 80-120 sq ft/gal

## 7. CORPS OF ENGINEER'S EVALUATION

## Physical and mechanical properties:

Percent solid
(ASTM D 1644, Method A):

12.6%

## <u>Percent water absorption (ambient temperature) (ASTM C 642):</u>

l day	0.17%
2 days	0.23%
4 days	0.33%
7 days	0.45%

Ratio of percent water absorption for treated to nontreated specimen (2-day submersion): 4.89%

#### Percent water transmission:

2	days	0.38%
4	days	0.61%
7	davs	0.87%

Ratio of percent water vapor transmission for treated to nontreated specimen (7-day diffusion): 24.6%

#### 8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of sealant activities involving

potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets should be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.

## 9. AVAILABILITY & COST

Available through sales representatives. A list of field sales representatives is available from ProSoCo. Call (913) 281-2700.

## 10. TECHNICAL SERVICE

Factory-trained representatives are available in principal cities throughout the continental United States. Assistance with no obligation may be obtained by calling (913) 281-2700 and asking for "Technical Service." A list of representatives is available on request.